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NOTICE OF ALLOWANCE AND FEE(S) DUE

PEARNE & GORDON LLP 1801 EAST 9TH STREET SUITE 1200 CLEVELAND, OH 44114-3108 EXAMINER
O HERN, BRENT T

ART UNIT PAPER NUMBER
1783

DATE MAILED: 03/02/2011

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/572,190	05/31/2006	Poul Erik Braad	NKTR-46238	2286

TITLE OF INVENTION: FLEXIBLE UNBONDED PIPE AND A METHOD FOR PRODUCING SUCH PIPE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	06/02/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN <u>THREE MONTHS</u> FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. <u>THIS STATUTORY PERIOD CANNOT BE EXTENDED.</u> SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

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I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

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B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

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Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

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appropriate. All further indicated unless correct maintenance fee notifica	correspondence includir ed below or directed oth	ig the Patent, advance of the lerwise in Block 1, by (a	rders and notification of a) specifying a new cor	f maintenance fees v respondence address	vill be m ; and/or (ailed to the current (b) indicating a separ	correspondence address as rate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) 116 7590 03/02/2011 PEARNE & GORDON LLP 1801 EAST 9TH STREET SUITE 1200 CLEVELAND, OH 44114-3108				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.			
							(Signature) (Date)
			L				
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTO	OR	ATTOR	NEY DOCKET NO.	CONFIRMATION NO.
10/572,190 TITLE OF INVENTION	05/31/2006 I: FLEXIBLE UNBOND	ED PIPE AND A METH	Poul Erik Braad OD FOR PRODUCING	SUCH PIPE	N	KTR-46238	2286
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nonprovisional	NO	\$1510	\$300	\$0	•	\$1810	06/02/2011
EXAM	IINER	ART UNIT	CLASS-SUBCLASS				
O HERN,	BRENT T	1783	428-036910	_			
 Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. 			(1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.				
PLEASE NOTE: Unl	less an assignee is ident h in 37 CFR 3.11. Comp	A TO BE PRINTED ON 7 ified below, no assignee oletion of this form is NO	data will appear on the	patent. If an assign an assignment.			cument has been filed for
Please check the appropr	riate assignee category or	categories (will not be pr	rinted on the patent):	☐ Individual ☐ C	orporatio	n or other private gro	up entity Government
4a. The following fee(s) are submitted: ☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			4b. Payment of Fce(s): (Please first reapply any previously paid issue fee shown above) ☐ A check is enclosed. ☐ Payment by credit card. Form PTO-2038 is attached. ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).				
5. Change in Entity Sta a. Applicant claim	tus (from status indicated as SMALL ENTITY statu		☐ b. Applicant is no l				R 1.27(g)(2).
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if requeecords of the United Sta	uired) will not be accepte tes Patent and Trademark	d from anyone other that Office.	n the applicant; a reg	istered att	torney or agent; or the	e assignee or other party in
Authorized Signature				Date			
Typed or printed name				Registration No.			
This collection of inform an application. Confiden submitting the complete this form and/or suggests Box 1450, Alexandria, V Alexandria, Virginia 223	tiality is governed by 35 d application form to the ions for reducing this but 7irginia 22313-1450. DO	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to th NOT SEND FEES OR (on is required to obtain on the collection is depending upon the inceeding the collection off COMPLETED FORMS	or retain a benefit by estimated to take 12 dividual case. Any co icer, U.S. Patent and TO THIS ADDRESS	the public minutes to mments Tradema S. SEND	which is to file (and o complete, including on the amount of tim rk Office, U.S. Depa TO: Commissioner fo	by the USPTO to process) gathering, preparing, and the you require to complete ettment of Commerce, P.O. or Patents, P.O. Box 1450,

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116 75	90 03/02/2011		EXAMINER		
PEARNE & GORDON LLP			O HERN, BRENT T		
1801 EAST 9TH S SUITE 1200	TREET		ART UNIT	PAPER NUMBER	
CLEVELAND, OF	H 44114-3108		1783		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 257 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 257 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- 1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- 9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

	Application No.	Applicant(s)	
	10/572,190	BRAAD, POUL ERIK	
Notice of Allowability	Examiner	Art Unit	
	BRENT T. O'HERN	1783	
	DREINT I. OHERIN	1763	
The MAILING DATE of this communication apperall claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in or other appropriate commu GHTS. This application is so	this application. If not included nication will be mailed in due course. TH	
1. This communication is responsive to <u>1/27/2011</u> .			
2. ☑ The allowed claim(s) is/are <u>1-9,11-19 and 21-38</u> .			
 3. Acknowledgment is made of a claim for foreign priority un a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 		r (f).	
2. Certified copies of the priority documents have	been received in Application	ı No	
3. Copies of the certified copies of the priority doc	cuments have been received	in this national stage application from th	е
International Bureau (PCT Rule 17.2(a)).			
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" on noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		a reply complying with the requirements	
 A SUBSTITUTE OATH OR DECLARATION must be submi INFORMAL PATENT APPLICATION (PTO-152) which give 			
5. CORRECTED DRAWINGS (as "replacement sheets") mus	t be submitted.		
(a) ☐ including changes required by the Notice of Draftspers	on's Patent Drawing Review	(PTO-948) attached	
1) ☐ hereto or 2) ☐ to Paper No./Mail Date			
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment or	in the Office action of	
Identifying indicia such as the application number (see 37 CFR 1, each sheet. Replacement sheet(s) should be labeled as such in the			
6. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT I			
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5 □ Notice of Inf	ormal Patent Application	
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)	_	mmary (PTO-413),	
	Paper No./I	Mail Date	
 Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date <u>1/27/2011</u> 	/. 🔼 Examiner's /	Amendment/Comment	
 Examiner's Comment Regarding Requirement for Deposit of Biological Material 	_	Statement of Reasons for Allowance	
	9.		
/BRENT T O'HERN/ Examiner, Art Unit 1783			
Examiner, Art Offic 1700			

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EXAMINER'S AMENDMENT

1. Authorization for this examiner's amendment was given in a telephone interview with Mr. Nobuhiko Sukenaga (reg. # 39,446) on 2/24/2011.

- 2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
- **3.** In claim 32, line 3 after the word "being" the word -- PVDF -- has been deleted.
- 4. In claim 32, line 3 after the word "being" the phrase -- PVDF (poly(vinylidene fluoride)) -- has been inserted.
- **5.** Please cancel claims 39-44 and 46-54.

REASONS FOR ALLOWANCE

6. The following is an examiner's statement of reasons for allowance:

A review of Applicant's arguments in the Paper filed 1/27/2011 and a review of the instant claims, which encompass the examiner's amendments as discussed with and accepted by Applicant's attorney, Mr. Nobuhiko Sukenaga (reg. # 39,446) in a phone interview on 2/24/2011 has convinced the examiner that the claims are allowable over the applied prior art of record.

7. Regarding independent claim 1 and the dependent claims, the prior art fails to teach or suggest a flexible unbonded pipe, said pipe comprising at least one polymer layer having a thickness of 4 mm or more, at least one film layer having a thickness of greater than 0 mm and 1 mm or less, and one or more armouring layers, said polymer

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layer being at least 10 times as thick as the film, said film layer providing a fluid permeation barrier against one or more of the fluids methane, hydrogen sulphides, carbon dioxides and water, which is higher than fluid permeation barrier against one or more of the fluids methane, hydrogen sulphides, carbon dioxides and water, which is higher than the fluid permeation barrier provided by the polymer layer determined at 50 °C and a pressure difference of 50 bar, and said polymer layer being bonded to said film layer via one or more bondings selected from the group of chemical bondings and physical bondings, wherein said armouring layers are not bonded to said polymer layer and said armouring layers are not bonded to each other, and wherein said film layer and said polymer layer are of different materials.

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8. The closest prior art of Glejbol et al. (WO 01/51839) teaches a flexible with an inner liner, however, fails to teach a polymer layer having a thickness of 4 mm or more and a film layer having a thickness of 0 mm and above and 1 mm or less with the polymer layer being bonded to the film layer via one or more bondings selected from the group of chemical bondings and physical bondings as well as several other limitations including and the polymer layer being at least 10 times as thick as the film, the film layer providing a fluid permeation barrier against one or more or all of the fluids methane, hydrogen sulphides, carbon dioxides and water, which is higher than the fluid permeation barrier provided by the polymer layer determined at 50 °C and a pressure difference of 50 bar.

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9. Another prior art of Odru (US 6,098,667) fails to teach many of the limitations of the claims like Glejbol. Odru's polymer layer is not bonded to the film layer but rather spaced and is not at least ten times as thick as the film.

- **10.** The secondary references of record do not teach or suggest the combined limitations not taught by Glejbol.
- 11. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brent T. O'Hern whose telephone number is (571)272-6385. The examiner can normally be reached on Monday-Thursday, 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample can be reached on (571) 272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brent T. O'Hern/ Examiner, Art Unit 1783 February 25, 2011